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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/446,553 05/19/95 HARVEY

J 5634.104

EXAMINER

LM61/0122

ART. UNIT, N PAPER NUMBER

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HOWREY & SIMON
1299 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004

2731

DATE MAILED: 01/22/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 5/29/97 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire three month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 2-15, 17-39 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 2-15, 17-39 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Art Unit: 2731

DETAILED ACTION

1. This Office Action is responsive to the amendment(s) filed May 29, 1997.

DOUBLE PATENTING V.S. PATENTS

2. After reviewing the restriction requirement under 35 USC 121 in US Patent 5,233,654 it is believed that the claims of the instant application are subject to a double patenting analysis against US Patent 5,233,654 and US Patent 5,335,277.

3. In view of further analysis and applicant's arguments, the rejection of the claims in the instant application under double patenting based on the broad analysis of *In re Schneller* as set forth in paragraphs 7-10 of the previous Office Action has been withdrawn.

DOUBLE PATENTING BETWEEN APPLICATIONS

4. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635

Serial Number: 08/446,553

Page 3

Art Unit: 2731

10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447

Art Unit: 2731

70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798

Art Unit: 2731

130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994

Serial Number: 08/446,553

Page 6

Art Unit: 2731

190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767

Serial Number: 08/446,553

Page 7

Art Unit: 2731

256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436

Art Unit: 2731

322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

5. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

- (1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;
- (3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the attached Appendix are

Art Unit: 2731

merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

Failure to comply with the above requirement will result in abandonment of the application.

INFORMATION DISCLOSURE STATEMENTS

6. Receipt is acknowledged of applicant's Information Disclosure Statements filed 9/8/95, 12/11/95, 12/22/95, 2/6/96, and 4/7/97. In view of the unusually large number of references cited in the instant application (approximately 2,200 originally and 645 in the subsequent IDS) and the failure of applicant to point out why such a large number of references is warranted, these references have been considered in accordance with 37 C.F.R. 1.97 and 1.98 to the best ability by the examiner with the time and resources available.

The foreign language references cited therein where there is no statement of relevance or no translation are not in compliance with 37 C.F.R. 1.98 and have not been considered. Numerous references listed in the IDS are subsequent to applicant's latest effective filing date of 9/11/87, therefore, the relevancy of these references is unclear. Also cited are numerous references that are apparently unrelated to the subject matter of the instant invention such as: US Patent # 33,189 directed toward a beehive, GB 1565319 directed toward a chemical compound, a cover sheet with only the word "ZING", a computer printout from a library search with the words "LST" on it and a page of business cards including that of co-inventor James Cuddihy, among others. The relevancy of these references cannot be ascertained. Furthermore, there are several database search results listed in foreign languages (such as German) which list only the title and

Art Unit: 2731

document information; no copy has been provided, therefore, these references have not been considered.

CLAIM REJECTIONS - 35 USC § 112

7. Claims 2-15 and 17-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The following limitations were not supported by the specification as originally filed:

In claim 2, “receiving some information content, *one or more control signals in respect of a budget*, and said at least one of a broadcast and a cablecast transmission, *said information content and said one or more control signals including a first projected datum, said first projected datum both designating a product or service and projecting a price or quantity*; storing *said first projected datum* in said computer; *generating budget data* by processing data stored in said computer in response to at least one of said control signals, *said budget data including two or more of a group of data including; (1) an income datum; (2) an expense datum; and (3) a profit datum*; and outputting to a subscriber at least some of said information content and at least one generated budget datum, *said information content explaining said budget datum.*”

In claim 3, “said resource data *including two or more of a group of datum including: (a) an equipment or real estate datum; (b) a labor datum; and © a financial datum.*”

Serial Number: 08/446,553

Art Unit: 2731

In claim 4, "programming said computer to respond to said broadcast or cablecast control signal in respect of said *budget*."

In claim 5, "(1) receiving at a transmitter station some code which is effective at a receiver station to generate and output *user specific budget data*, said code having at each of said plurality of receiver stations respectively, a target processor to process data."

In claim 9, "(1) receiving said at least one instruct signal to be transmitted by the remote intermediate data transmitter station and delivering said at least one instruct signal to a transmitter, said at least one instruct signal being effective at said at least one receiver station to generate and output *user specific budget data*".

In claim 12, "generating and outputting *user specific budget data* on the basis of information received from said processor."

In claim 17, "performing at least one of formulating and assembling in said network a signal effective at said interactive mass medium program output apparatus to generate and output *user specific budget data*; and delivering combined medium programming that explains a user specific budget at said output device on the basis of said signal."

In claim 18, "*said mass medium programming of a duration, only some of said duration containing time interval of specific relevance*, said method further comprising the steps of: outputting said mass medium programming at said receiver station; and outputting said *budget datum in said time interval*."

In claim 19, "prompting said subscriber via said video for data input, said data input to serve as a basis for a budget", "assembling in said network, a plurality of budgeting instructions,

Art Unit: 2731

said plurality of budgeting instruction operative at said interactive video output apparatus *to formulate a budget*; and delivering said *budget* to said interactive video output apparatus.”

In claim 20, “said one or more remote stations is capable of *generating higher language code, said higher language code being contained in said plurality of budgeting instructions*”.

In claim 24, “processing said input data to serve as a basis for generating one or more of *said plurality of budgeting instructions*.”.

In claim 25, “wherein *formulating said budget* comprises the steps of: *outputting video, audio, or hardcopy; computing a value in accordance with generally applicable output information content; and presenting said value within said video, audio or hardcopy.*”

In claim 27, “An interactive method for *delivering a budget for use with an interactive mass medium programming output apparatus*, said interactive mass medium programming output apparatus having an input device for receiving input from a subscriber, a memory for storing data, a processor for processing said subscriber reply, a transmitter for transmitting information to one or more remote stations, and a receiver for receiving a signal from said one or more remote stations, said interactive mass medium output apparatus and said one or more remote stations comprising a network having a plurality of transmitter devices, said network being capable of generating and assembling at least some of a message stream based upon the data, said message stream operable at said interactive mass medium programming output apparatus to deliver generally applicable output information content and *one or more instruct signals which formulate budget output*, the method comprising the step of: outputting mass medium programming; prompting said subscriber during said mass medium programming for *input in respect of said budget*; receiving a reply from said subscriber at said input device in response to said prompting; processing said reply

Art Unit: 2731

from said step of receiving said reply and selecting said data; communicating said selected data to at last one of said one or more remote stations; and *delivering said budget output.*”

In claim 32, “said step of *delivering said budget* comprises: *outputting video, audio or hardcopy; computing a value in accordance with said selected and transmitted generally applicable output information content; and delivering said value in said outputted video, audio or hardcopy.*”

In claim 33, “said interactive mass medium programming output apparatus, *outputs mass medium programming of a duration, said duration including a time interval of specific relevance*, said method further comprising the step of outputting subscriber specific information *during said time interval of specific relevance.*”

In claim 34, “selecting generally applicable information to be outputted *during said time interval of specific relevance;*”.

In claim 35, “An interactive method for delivering *a modified budget for use with an interactive mass medium program output apparatus, -----*, said network being capable of generating and assembling *at least some of a budgeting control instruction effective at said interactive mass medium program output apparatus to generate and output a budget modification*, the method comprising the steps of: *displaying combined medium programming explaining a budget; prompting said subscriber to modify said budget, -----, delivering said modified budget to said interactive mass medium program output apparatus on the basis of said budgeting control instruction.*”

Art Unit: 2731

In claim 36, “said *one of a code and a datum is part of a budget generated* at said interactive mass medium program output apparatus -----, said instruct signal containing at least one of said software and *said budget control instruction.*”

In claim 37, “said reply includes *a modification instruction and data to serve as a basis for modifying said budget*, said method further comprising the steps of processing *a variable refined in said network on the basis of said data*, said processing occurring at said interactive mass medium program output apparatus.”

In claim 38, “the step of *delivering mass medium programming explaining said modified budget*, said delivering being done upon the basis of *said budgeting control instruction.*”

In claim 39, “selecting generally applicable video, audio or print in accordance with *said budgeting control instruction*; and outputting said generally applicable information.”

Especially, regarding the term “budget”, the specification fails to provide an adequate written description of the embodiments claimed in the instant case. According to the applicants’ remarks on pages 31 and 32 of the response filed May 29, 1997, the term “budget” was directed to the optimal crop planting embodiment in the context such as “--- optimal crop planting plans -- -- include *budget* information of projected revenues, *expenses and profits.*” However, specification fails to adequately teach the generating of budget data by processing data stored in the computer in response to a control signal, outputting information content explaining the budget datum, outputting the budget datum in the time interval (where the time interval is recited in the context of “said mass medium programming of a duration, only some of said duration containing *time interval* of specific relevance), budgeting instruction operative at the interactive video output apparatus to formulate a budget, etc., etc.

Art Unit: 2731

Further, regarding claims 27, 33, and 34, the specification fails to provide an adequate written description of the combination embodiment as recited in the claims, the combination being the optimal crop planting plans and stock analysis.

8. Claims 2-8, 19-27, 33, 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 8, it is not clear what “both” is referring to.

In claim 5, step (3), it is not clear what is meant by “in least”.

In claim 19, in ‘assembling’ step, it is not clear what “a plurality of budgeting instructions” are, where they are coming from, and how they are being assembled.

In claim 20, it is not clear what “higher language code” really is; if it is some kind of instruction in assembly language or something, then what is the meaning of the ‘higher language code being contained in the budgeting instruction’?

In claim 27, 33, and 34, it is not clear what is meant by “outputting mass medium programming of a duration including a time interval of specific relevance”; is the mass medium programming of a certain duration? Further, what includes the time interval?

CLAIM REJECTIONS - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 2731

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

10. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Hedger et al., "Telesoftware - value added teletext", 1980 IEEE (Hedger).

Hedger discloses a Teletext TV receivers including a microcomputer and a computer type display (p. 556). Hedger also teaches broadcast by a television company of computer programs which can be carried on unused portion of the normal television signal. The broadcasting of the computer programs allow the function of the program loading device of the home microcomputer to be provided by existing parts of the television receiver: the tuner, IF strip and teletext decode (p. 558). Some of the examples of these downloadable programs include (a) self-assessment programs, such as mortgage and tax calculations, and welfare rights examinations, and (b) database manipulation, such as stock market information can be analyzed in various ways by a program under the control of the user (558-559).

More specifically, Hedger's teaching of broadcasting computer programs and users being able to receive the broadcasted programs to enable wide variety of tasks to be performed generally reads on the method claimed in claim 12. Although Hedger does not go into the detail of describing a processor interrupt signal when a program is to be received, it is inherent that when broadcasted computer program is detected, processor would respond to such detection. The user specific budget data reads on the stock market information and related user's manipulation of user specific data (stock of user's interest).

Art Unit: 2731

CLAIM REJECTIONS - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over “A Public Broadcaster’s View of Teletext in the United States” by Hartford Gunn (hereinafter “Gunn”).

Gunn discloses teletext system. The data transmitted by a teletext system can inherently be received by a plurality of television receiver stations since the transmitted data are embedded in the vertical blanking intervals of television signals which are broadcasted by a broadcast station. Gunn on page 5, lines 12 and 48 discloses that the receiver station includes a decoder, a microprocessor and memory. The decoder and the microprocessor correspond to the claimed “signal detector and processor” since they detect the presence of one or more control signals

Art Unit: 2731

(e.g., the activated teletext signal, page 5, lines 20-21, page 6, lines 29-31) and process some codes (e.g., the downloaded stock analysis software, etc. page 5, lines 1-26). Since the receiver station receives one or more downloadable software (e.g., stock programs) broadcasted by a broadcast station ("a transmitter station"), the one or more downloadable software must be first received ("code receiving step") by the broadcast station. As clearly disclosed on page 5, the receiver station receives downloadable programs ("some code") for analyzing stock performance. The claimed "user specific budget data" is met by the output stock information resulting from the analysis performed by the downloaded program. Since the microprocessor as described above receives the downloadable programs, it can be considered as "a target processor" (that is, if the processor is programmed to receive the stock software, the detected downloadable stock software will be directed (or targeted) to the processor). The "code transferring step" is an inherent step of Gunn because in order for the broadcast station ("transmitter station") to transmit the downloadable software, the downloadable software must be first transferred to the transmitter of the broadcast station. The step of "receiving one or more control signals" at the transmitter station is also an inherent step of Gunn since the receiver station of Gunn is capable of receiving the teletext activation signal (page 5, lines 20-21). That is, in order for the transmitter of the broadcast station ("transmitter station") to transmit the teletext activation signal ("one or more control signals"), the teletext activation signal must be first received by broadcast station and then transferred ("control signal transferring step") to the transmitter of the broadcast station for transmission. The discussion on page 5, line 21 indicates that the teletext activation signal is operated to activate ("execute") the software. As explained above, both the downloadable

Art Unit: 2731

software (“some code”) and the teletext activation signal (“one or more control signal”) are broadcasted (“transmitted”) by the broadcast station (“transmitter station”).

Although Gunn does not explicitly disclose that the stock analysis software (“some code”) is executed by the teletext activation signal (“one or more control signals”), Gunn on page 5, lines 1-9 clearly suggest that software (e.g., education program) can be activated or executed by a teletext activation signal. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to also use a teletext signal for activating or executing the downloadable stock analysis software (“some code”) of Gunn in order not only to allow the system of Gunn to activate the software locally but to provide the additional advantage of activating the software remotely.

Regarding claim 6, the system of Gunn is a teletext system. Therefore, the teletext activation signal and downloadable stock software are embedded in the vertical blanking interval of a television signal.

Regarding claim 7, Gunn on page 6, line 30-31, discloses that viewer can select (“viewer reaction”) information by selecting a teletext page number, and on page 4, line 5, Gunn further teaches that the information adds (“supplements”) something to the program.

Regarding claim 8, since the teletext activation signal is used for executing the downloadable processor instruction (software), it can be considered as “incorporate at least some of said downloadable processor instruction”.

Art Unit: 2731

Response to Arguments

13. Applicant's arguments with respect to claims 2-15, and 17-39 have been considered but are moot in view of the new ground(s) of rejection.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is (703) 305-4363. The examiner can normally be reached on M-F from 9AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (703) 305-4378. The fax phone number for this Group is (703) 308-9051.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-3900.

M.JUNG

January 14, 1998


MIN JUNG
PATENT EXAMINER
GROUP 26002731